

REMARKS

Responsive to the aforementioned office letter, and at the outset, the applicant has attached as an appendix claims amended with brackets and underlining so that changes may be readily observed. The appended claim drafts are only an aid and not part of the amendment.

In paragraph 2 of the office action, the Examiner rejected Claims 9-18, 33-40 and 51-55 under 35 U.S.C. 112. With regard to Claim 9 and Claim 33, the Examiner contends that the "completely liquid driven control has not been described in the disclosure". In support thereof, the Examiner refers to the passage in column 5, lines 29-33 regarding the solenoid. It is urged that the language "completely liquid driven control" is accurate and has more than sufficient support in the specification. Indeed, it is to be noted that the entire specification is directed to a control system which is completely liquid driven. Moreover, and if anything, it is essentially liquid soda driven. This is precisely what the applicant sought to achieve and, in fact, did achieve. When examining the specification, the applicant described the prior art dealing with ratio valves, such as volumetric ratio valves. However, the specification clearly describes the fact that these valves must have solenoids, electric sensors and microswitches in order to achieve the necessary switching. It was precisely this type of full electrical control which the applicant did wish to avoid. Please see, for example, column 1, lines 46-56.

With regard to a liquid driven system, please see column 2, lines 12-16 and, particularly, the passage which recites "The pressure of the soda is used to operate both drive pistons". In effect, this is a completely liquid driven system. Both the soda 5 pressure with the soda side and the syrup side are driven by the soda pressure. Please also note column 2, lines 18-22 in which it is described that the system operates solely from incoming pressure of the soda and requires no solenoid switching. In essence, the entire specification deals with the fact that there is a liquid 10 driven control.

In substance, the term "control" does not refer to turning a system "on" and "off". Admittedly, the solenoid 88 does perform that function. However, in that sense, the solenoid is acting only as a switch. It will cause operation of the system and allow 15 stopping of the system. However, the solenoid does not drive anything. It only turns the system on and off, as aforesaid. the control system described in the application controls the direction of the piston 120. In short, the control system actually comprises the various pistons 48, 60 64, 80 and 76, and potentially the 20 pistons 104 and 102. However, the solenoid only causes energization and de-energization. It is also to be noted that this is one of the major distinctions with respect to the Credle patent. Credle necessarily must depend on electrical power for operation. As indicated previously, in the instant application, the solenoid 25 only operates as a switch.

Based on the foregoing, it is believed that the language "completely liquid driven control" is accurate and does describe one of the important facets of the present invention. However, the applicant has recited that the drive control is a completely liquid 5 soda driven control. Presumably, this will obviate any objection under 35 U.S.C. 112 and allowance Claims 9 and 33, as well as any other claims which may have been rejected on this basis, is respectfully solicited.

With regard to the lack antecedent basis for Claims 9-18, such 10 has been corrected.

The Examiner next rejected Claim 51 and 54 with regard to the use of the terminology "the floating piston being non-biased". Again, reconsideration is urged. Please note, for example, that portion of the specification in column 6, lines 34-52. In 15 particular, please note column 6, lines 47-52. Specifically, this passage alone points out that within the chamber 68, the force applied by the piston 60 is equal to that of the piston 48 and therefore the piston 48 remains in its present position. In short, the piston is not forced from one end position to the other end 20 position. Nevertheless, in order to avoid any ambiguity, the term "floating piston" has been eliminated. These claims have been amended to recite that the control piston is not biased to either of the end positions in the off state and this is clearly described in the specification and, particularly, in column 6, lines 43-52. 25 Please note that when the valve piston 64 pushes against the valve piston 48 the force supplied by the piston 60 is equal to that of

the piston 48 and therefore the piston 48 remains in its present position. In effect, this is a definition of a floating piston. Notwithstanding, it is believed that elimination of the term "floating piston" should eliminate any ambiguity.

5 With regard to Claims 52 and 55, the Examiner contended there was no air gap. However, it is to be noted that between the cylinders 116 and 146 there is a piston rod 140. That piston rod is traveling through an air gap by any description. In effect, it is an open space or open area. However, in order to avoid the term 10 "air gap" or any confusion which may have been derived by the use of that term, the applicant has amended Claims 52 and 55 to call for an open space. It is believed that this language should obviate any indefiniteness in that regard.

15 With regard to the confusion between Claims 45 and 48, correction of the proper antecedent basis by use of "said second fluid flow control" should eliminate any ambiguity.

In order to insure that Claims 51 and 53 were not duplicates, dependency of Claim 53 has been changed.

20 With regard to Claim 49, the subject matter of Claim 50 has been added to this claim. It was indicated in the office action that Claim 50 did contain allowable subject matter. Therefore, it is believed that Claim 49, as amended, should now be in allowable condition.

25 By this present amendment, the applicant has canceled the only claim which was rejected on its merits. Moreover, the applicant has, by this amendment, attempted to correct any indefiniteness in

the claims. It is believed that with the changes made and the explanation provided, the applicant has eliminated any possible basis of rejection under 35 U.S.C. 112. Allowance of all of the remaining claims in the application is therefore respectfully

5 solicited.

In order to show the changes with regard to each of the claims consecutively, the applicant is herewith setting forth the status of each claim and the action taken by this present amendment:

	Claims 1-8	Allowed
10	Claims 9, 10	Amended
	Claim 11	Resubmitted
	Claim 12	Amended
	Claim 13	Resubmitted
	Claim 14	Amended
15	Claims 15-17	Resubmitted
	Claim 18	Amended
	Claims 19-26	Allowed
	Claim 31	Allowed
	Claim 32	Allowed
20	Claim 33	Amended
	Claims 34-40	Resubmitted
	Claims 41-47	Allowed
	Claim 48	Amended
	Claim 49	Amended (includes Claim 50)
25	Claim 50	Canceled
	Claim 51	Resubmitted

**Claim 52-54**      **Amended**

**Claim 55** **Amended**

The applicant is herewith submitting his check to cover the statutory fee for submission of a response after final rejection.

5 Please assess any additional cost or credit any overpayment to  
Deposit Account No. 19-0258.

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Respectfully submitted,

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HAYNES\AMEND.B

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